



SXKO-FLAT-DROP-24-OS-HDPE

# FIBRE OPTIC CABLES

## Flat DROP singlemode



Outer jacket

Cable secondary protection

Cable type acc. to the number of tubes

Operating/Storage temperature

Installation temperature

Fibre type

Diameter of the primary protection

Short-term tensile resistance

Long-term tensile resistance

Short-term pressure resistance

Minimum bend radius (short term)

Minimum bend radius (long-term)

Cable diameter

Cable weight

The number of fibres in the tube

**HDPE**  
**reaction to fire F<sub>ca</sub>**  
**gel-filled tube**  
**CLT**  
**-40 to +70 °C**  
**-15 to +50 °C**  
**G.657.A1**  
**250 µm**  
**1 600 N**  
**650 N**  
**4 000 N/100 mm**  
**150 mm cable**  
**250 mm cable**  
**12f: 4,3 x 7,4 mm,**  
**24f: 4,2 x 9,1 mm**  
**12f: 35 kg/km,**  
**24f: 44 kg/km**  
**12 and 24**

Outdoor fibre optic self-supporting Flat DROP cable Solarix SXKO-FLAT-DROP-OS-HDPE reaction to fire Fca. The cable is of flat construction and is ideal for overhead installations with spans up to 80 m using flat cable anchors. The cable can also be installed by pulling into HDPE ducts. The G.657.A1 type fibres are placed in a central gel-filled tube to protect them from moisture. The cable includes two FRP strength members inside the sheath to increase mechanical resistance. The fibre optic cable contains no metal elements and is fully dielectric. Flat DROP cable is available in 12 and 24 fibre versions.

### Part No.

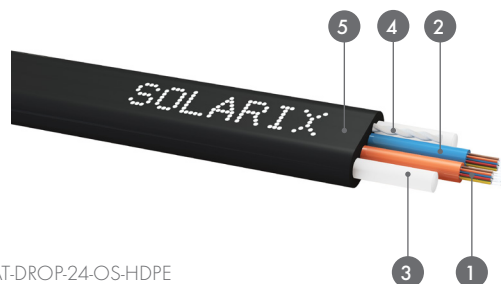
### Description

SXKO-FLAT-DROP-12-OS-HDPE

Outdoor cable Flat DROP Solarix 12f 9/125, HDPE F<sub>ca</sub>, black

SXKO-FLAT-DROP-24-OS-HDPE

Outdoor cable Flat DROP Solarix 24f 9/125, HDPE F<sub>ca</sub>, black



SXKO-FLAT-DROP-24-OS-HDPE

### Cable construction

1. Fibres
2. Gel-filled tube
3. Strength member
4. Ripcord
5. Outer jacket



+420 840 505 555 • info@solarix.cz  
www.solarix.cz



# FIBRE OPTIC CABLES

## Optical Fibres Parameters

### Singlemode Fibres Basic Parameters

Geometric Parameters	Unit	ITU-T G.652.D	ITU-T G.657.A1	ITU-T G.657.A2
<b>Mode Field Diameter (MFD)</b>				
@ 1 310 nm	µm	9,2 ± 0,4	8,9 ± 0,4	8,6 ± 0,4
@ 1 550 nm	µm	10,4 ± 0,5	10,1 ± 0,5	9,6 ± 0,4
Cladding diameter	µm	125 ± 0,7	125 ± 0,7	125 ± 0,7
Coating diameter	µm	242 ± 5,0 (uncolored)	242 ± 5,0 (uncolored)	242 ± 5,0
Core-Cladding Concentricity Error	µm	≤ 0,6	≤ 0,5	≤ 0,5
Cladding-Coating Concentricity Error	µm	≤ 12	≤ 12	≤ 12
<b>Transmission Parameters</b>				
<b>Attenuation</b>				
@ 1 310 nm	dB/km	0,32 - 0,36 <sup>1)</sup>	0,32 - 0,36 <sup>1)</sup>	0,32 - 0,36 <sup>1)</sup>
@ 1 550 nm	dB/km	0,19 - 0,24 <sup>1)</sup>	0,19 - 0,24 <sup>1)</sup>	0,19 - 0,24 <sup>1)</sup>
@ 1 625 nm	dB/km	0,22 - 0,26 <sup>1)</sup>	0,22 - 0,26 <sup>1)</sup>	0,22 - 0,26 <sup>1)</sup>
<b>Dispersion Coefficient</b>				
@ 1 550 nm	ps/(nm*km)	≤ 18	≤ 18	≤ 18
@ 1 625 nm	ps/(nm*km)	≤ 22	≤ 22	≤ 22
PMD individual fibre	ps/√km	0,1	0,1	0,1
Cable Cutoff Wavelength λ <sub>cc</sub>	nm	≤ 1 260	≤ 1 260	≤ 1 260
Fibre Cutoff Wavelength λ <sub>c</sub>	nm	1 150 - 1 330	1 150 - 1 330	1 150 - 1 330

<sup>1)</sup> A typical value for fibres in loose tube cables.

### Multimode Fibres Basic Parameters

Geometric Parameters	Unit	ITU-T G.651.1 OM2	ITU-T G.651.1 OM3	ITU-T G.651.1 OM4	ITU-T G.651.1 OM5
Core diameter	µm	50 ± 2,5	50 ± 2,5	50 ± 2,5	50 ± 2,5
Cladding diameter	µm	125 ± 1,0	125 ± 1,0	125 ± 1,0	125 ± 1,0
Core-Cladding Concentricity Error	µm	≤ 1,5	≤ 1,0	≤ 1,0	≤ 1,0
Cladding-Coating Concentricity Error	µm	≤ 10,0	≤ 10,0	≤ 10,0	≤ 10,0
<b>Transmission Parameters</b>					
Numerical aperture	-	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015
<b>Attenuation</b>					
@ 850 nm	dB/km	2,2 - 3,5 <sup>1)</sup>	2,2 - 3,5 <sup>1)</sup>	2,2 - 3,5 <sup>1)</sup>	2,2 - 3,0 <sup>1)</sup>
@ 1 300 nm	dB/km	0,5 - 1,5 <sup>1)</sup>	0,5 - 1,5 <sup>1)</sup>	0,5 - 1,5 <sup>1)</sup>	0,5 - 1,5 <sup>1)</sup>
<b>Bandwidth</b>					
@ 850 nm	MHz*km	≥ 500	≥ 1 500	≥ 3 500	≥ 3 500
@ 953 nm	MHz*km	-	-	-	≥ 1 850
@ 1 300 nm	MHz*km	≥ 500	≥ 500	≥ 500	≥ 500

<sup>1)</sup> A typical value for fibres in loose tube cables.

# FIBRE OPTICS

## Color Coding for Fibres and Tubes

### Fibres Color Coding

Fibre	1	2	3	4	5	6	7	8	9	10	11	12
Colour	blue	orange	green	braun	grey	white	red	black	yellow	purple	pink	turquoise
Fibre	13	14	15	16	17	18	19	20	21	22	23	24
Colour <sup>1)</sup>	blue	orange	green	braun	grey	white	red	black	yellow	purple	pink	turquoise

<sup>1)</sup> Colour with a strip

### Tubes Color Coding for MLT Cables

Tube	1	2	3	4	5	6	7	8	9	10	11	12
Colour	blue	orange	green	braun	grey	white	red	black	yellow	purple	pink	turquoise

### Tubes Color Coding for MLT Cables

Tube	1	2	3	4
Colour	red	green	natural	natural